

a second polarizing element provided on substantially an entire rear surface of said liquid crystal display main body, said second polarizing element having a second polarizing axis, said first and second polarizing axes intersecting at right angles wherein lack of electrical interconnection between said plurality of liquid crystal panels facilitates minimizing spacing therebetween and configuration of said first polarizing element and said second polarizing element renders any spacing less noticeable;

said display further including a photo blocking film disposed perpendicular to said display and configured to substantially block diagonal incident light; and

a first photo-blocking film which covers a circumference of each pixel in a predetermined trace width is made of a layered film made of a metal film and a photo absorbing film which absorbs light.

REMARKS

In the Official Action dated February 3, 1997, the Examiner rejected various claims under 35 USC § 112, first paragraph, as failing to adequately teach how to make or use the invention, i.e., failing to provide an enabling disclosure. Claim 6 was indicated as allowed. Claims 5 and 45 were indicated as allowable if amended to overcome the rejection under 35 U.S.C. § 112 and to include features of the claims upon which they are dependant. The Examiner also noted that the features which were previously argued as

distinguishing the invention over the cited prior art (i.e. the light blocking layer) did not appear in the claims. Claims 1, 4, 5, 8, 11, 15, 20, 25, 28, 31, 34, 37, 43 and 45 are amended herewith to more clearly define the invention, and/or to overcome the § 112, first paragraph rejection. Claim 3 is cancelled herewith.

The specification and claims are amended herewith to clarify that the structures previously referred to as "deflecting plates" with "deflecting axes" are in fact "polarizing plates" with "polarizing axes" as discussed between the Examiner and Applicants undersigned representative in a teleconference on March 12, 1997. Applicants respectfully submit that no new matter is added by such amendments as the specification, including for example Fig. 1, discloses and discusses a first polarizing element having a first polarizing axis and a second polarizing element (8), which has a second polarizing axis that intersects with the first polarizing axis at right angles (as described albeit using the term "deflecting" on page 8, lines 19-24). As appreciated by the Examiner, as illustrated in Fig. 1 there are no deflecting elements having axes disposed at right angles. Further, as pointed out by the Examiner, "cross nicol state" is used, as known in the art, to refer to polarizers. Thus there is support for amending the application to change "deflecting elements" to "polarizers", and "deflecting axis" to "polarizing axis". Accordingly, the rejection(s) under 35 U.S.C. § 112, first paragraph are overcome.

Claims 4, 32, 35 and 43 were rejected as anticipated by Kibe. Claims 9, 12, 16, 21, 26, 29 and 46 were rejected over Kibe in combination with Kitihara and Masaki. Applicants respectfully submit that the claims are amended herewith to specifically recite elements previously argued as distinctions but which "were not recited in the rejected claims." Thus, previously submitted arguments i.e., related to the distinction(s) associated with "a light blocking layer that blocks incident light diagonal with respect to the display ..." are applicable in view of the claim amendments and the claims should be found to be patentably distinguishable over the cited art, as previously argued.

New claims 48-51 are added herewith and do not raise new issue since they are based on combining claims already in the application. Specifically, new claim 48 corresponds to claims 1 and 14 combined; 49 corresponds to claims 1 and 19 combined; 50 corresponds to claims 1 and 33 combined; and 51 corresponds to 1 and 36 combined. The combined claims include the amendment referred to hereinbefore which was previously argued as distinguishing the invention over the cited art.

The Examiner asserted that claims 14 and 19 are obvious, but provided no cited reference as the basis for such rejection. New claims 48 and 49 provide for the features of a large-screen liquid crystal display which is made by sticking plural panels together to make the joints of the panels inconspicuous. In the newly added claims as a result, compared with using thermosetting resin,

display areas are effectively prevented from erosion due to heat. Therefore, borders of the panels which do not contribute to display become narrow, and ends of the display areas are made to exist as close as possible to the borders. Consequently, the joints of the panels become inconspicuous. The arrangements of these claims are techniques that make the joints of the panels inconspicuous using an ultraviolet-ray-setting resin as a seal material for a large-screen liquid crystal display which is made by sticking panels together, and therefore the arrangements cannot be anticipated from conventional liquid-crystal display techniques which do not stick plural panels together. Moreover, they are not taught nor suggested by the conventional techniques which stick plural panels together or by the primary reference of Kibe which has been discussed in previous responses.

Further, the Examiner judges that claim 33 and 36 are obvious, but provides no cited reference as a basis. Thus, claims 50 and 51 added herewith specifically provide for a photo-absorbing film which absorbs light to be used as a first photo-blocking film (black matrix). As a result, the black matrix in the display panel and borders of panels are made hard to be visually distinguished from each other. Consequently, the joints of the panels become inconspicuous.

The configuration recited in the new claims are techniques that make the joints of the panels inconspicuous using a photo-absorbing film which absorbs light as the black matrix for a large-

screen liquid-crystal display which is made by sticking plural panels together. Therefore the arrangements cannot be anticipated from conventional liquid-crystal display techniques which do not stick plural panels together. Moreover, they are not taught nor suggested by conventional techniques which stick plural panels together. That is none of the references cited alone or in combination disclose or suggest the aspects of Applicants invention recited in the newly added claims.

Entry of the present amendment for purposes of appeal, if an appeal is necessary, is respectfully requested. Entry is necessary because Applicant believes that the amended claims are now in condition for allowance notwithstanding the cited art and the Examiner's arguments thereunder.

The present amendments were not submitted at an earlier date as the Examiner's rejections were believed to have been fully met by the amendments and remarks made in the response to the last Office Action. Thus, this response represents the Applicant's only opportunity to make the present amendments and remarks a part of the record in this application.

Entry is finally believed proper at this time because the amendments do not raise any new issues that would require further consideration and/or search, since they narrow the scope of the claims already adequately and properly searched by the Examiner, and because they do not introduce any new matter.

Applicants respectfully submit that the present application is

Y. Izumi, et al.
U.S.S.N.: 08/468,649
Page 20

in condition for allowance. Therefore, reconsideration and allowance are respectfully requested.

The Examiner is invited and encouraged to telephone the undersigned with any concerns in furtherance of the prosecution of the present application.

Respectfully submitted,
DIKE, BRONSTEIN ROBERTS &
CUSHMAN, LLP



Brian L. Michaelis
(Reg. No. 34,221)
130 Water Street
Boston, MA 02109
617-523-3400
617-523-6440

Date: April 4, 1997

